

Effectiveness of Use of Makerere University E-Learning Environment (MUELE) in the Lens of DeLone and McLean's Model

Patrick Waiswa

Supervisors: Prof. Fred E K Bakkabulindi
Dr. David Kabugo

Abstract

The global trend of embracing electronic learning (e-learning) platforms in higher education raises a crucial need to have evidence of achieving their goals. In other words, are higher learning institutions getting the benefits of investing in e-learning platforms? Hence, a study on *effectiveness of use* of Makerere University E-Learning Environment (MUELE) was conducted. The study was guided by the DeLone and McLean's (2003) information systems success model which suggests six dimensions of effectiveness of use of an information system. In the case of MUELE, these six dimensions were, namely, *net benefits of use of MUELE*, *use of MUELE*, *user satisfaction with MUELE*, *quality of information generated by MUELE*, *quality of performance of MUELE* and *quality of technical support received by a user of MUELE*. These dimensions were interrelated, hence, providing five hypotheses (H1 – H5) that were tested. The study used a mixed method approach of research but was predominantly quantitative. A self-administered questionnaire was used to collect quantitative data from a total of 492 undergraduate students from four colleges in Makerere University while interview guides were used to collect qualitative data from seven participants of different categories. Descriptive analysis was used to assess the *effectiveness of use of MUELE* and linear regression was used to test the hypotheses. Findings indicated an average overall mean for each of the six constructs of the effectiveness of use of MUELE. In addition, all the hypotheses were supported. This study made a theoretical contribution by operationalizing the dimensions of effectiveness of use of MUELE and, hence, developing a tool for its measurement. This study further tested and enhanced the applicability of the DeLone and McLean's (2003) system success model in the evaluation of effectiveness of e-learning findings of which shall be used by other researchers in future studies. As a policy contribution, findings from the study shall provide guidance in the review of policy documents at national and institutional levels which provide for the use of ICT in the teaching and learning.

Key words/Phrases: *DeLone and McLean, effectiveness, e-learning, information systems success, MUELE, teaching and learning.*